The Halifax Amateur Radio Club



# REFLECTOR

PO BOX 8895 HALIFAX NS B3K 5M5 October 2014, Volume 75 Number 8 club web site is www.halifax-arc.org

# HARC's Basic Amateur Radio Course Began September 4



Executive President - Scott Wood, VE1QD 823-2761 velqd@rac.ca First V.P. - Bill Elliott, VE1MR 865-8567 bowser.elliott@ns.sympatico.ca leblanc@accesscable.net 2nd V.P. - Doug LeBlanc, VE1LDL 465-4665 Secretary - Jeremy Fowler, VE1JHF 240-4302 VE1JHF@Gmail.com Treasurer - Jim Guilford, VE1JG 466-2124 jimguilford@gmail.com Director-at-Large: - Ian Pierce VE1IGP 469-3474 igpearce@hotmail.com Club Station Mgr. - Jim Flowers, VE1JIM ve1jim@ns.sympatico.ca 443-8657 Past President - Fraser MacDougal, VE1WO 865-4198 fmac@eastlink.ca

HARC Club Station phone number - 490-6421

#### **Committees/Offices/Prime Contacts**

Government & Media Relations – Murray MacDonald, VE1BB 826-7831

twomacds@ns.sympatico.ca.

OSL Bureau Mgr - Tom Caithness, VE1GTC 477-7081 tom.caithness@ns.sympatico.ca EMO Coordinator - Dave George, VE1AJP 466-8723 dgeorge@dal.ca EMO Trailer coordinator - David Musgrave, VE1EDA ve1eda@rac.ca 435-4333 Reflector editor - Lynn Bowser, VE1ENT 865-8567 bowser.elliott@ns.sympatico.ca Reflector Dist. - Carol Wood, VE1HAZ carolwood@accesswave.ca Membership - Howard Dickson, VE1DHD dhdickson@eastlink.ca Web page content contact – Howard Dickson, VE1DHD dhdickson@eastlink.ca Basic ham course - Scott Verge, VE1SRV 412-3448 scott@ve1srv.net 2014 Flea market Chair – Jeremy Fowler, VE1JHF 240-4302 VE1JHF@Gmail.com

Youth Coordinator -Field Day coordinator -

Safety Officer - Terry Bigelow, VE1TRB ve1trb@eastlink.ca NSARA Director - Barry Diggins, VE1TRI 861-3719 ve1tri@rac.ca Honorary Legal Counsel – Paul Radford, VE1ARH

#### Non Club Contacts

RAC Atlantic Director - Everett Price, VO1DK vo1dk@rac.ca
RAC Section Manager - Craig Seaboyer, VE1DSS cseaboye@stfx.ca
RAC Assistant Director for HRM Scott Wood, VE1QD, 823-2761 ve1qd@rac.ca

# **Take-15 Net Controllers**

This will be the rotation. We would like at least 2 or 3 more.

**If you want to join,** let Bill Elliott, VE1MR, know.

Oct. 12 Emil **VE1ESP** Oct. 19 Peter VE1PJW Oct. 26 Win **VE1WIN** Nov. 2 Doug **VE1LDL** Nov. 9 Bruce VE1MLW 16 Emil **VE1ESP** Nov. VE1PJW 23 Peter Nov.

Deadline for submissions to the November Reflector is Saturday, Nov. 8, 2014

Photos this issue thanks to Ian, VE1IGP; Jeremy, VE1JHF; and VE1MR -ed



# Puzzler - Do you know?

What is the National Do Not Call List for? Answer on page 2 The October, 2014 General Meeting of the Halifax Amateur Radio Club will be held Wednesday, Oct. 15, in the Senior's Room on the 1st floor of the St. Andrew's Centre, 3380 Barnstead Lane, Halifax.

6:30-7:30 pm - Social Hour with refreshments

7:30 – 8:30pm - Speaker, Al

Penny, VO1NO

Topic: The Brendan Quest: A Two meter Expedition to Newfoundland in July 2014

8:30–9:30pm Regular Monthly Business Meeting. The meeting agenda is on the HARC web site

Guests are welcome

To make the most of **our web page** please send photos, notices of events, and ham radio news items, etc. to Howard Dickson, VE1DHD by e-mail at dhdickson@eastlink.ca

Never try to keep more than 300 separate thoughts in your mind during your swing.



# GENERAL INFORMATION

Sunday evenings:

TAKE-15 NET at 8:30 PM

**CLUB REPEATERS:** 

VE1PSR - 147.270 MHz + TX=82.5 VE1PSR/UHF - 444.350 MHz +

VE1PSR/6M - 53.550 MHz - access tone 151.4 Hz

VE1HNS - 146.940 MHz - TX=82.5

PACKET: VE1NSD 145.050 MHz LAN NODE

# Events for Your Calendar

Beginning on Thursday, September 4, 2014, the Basic Amateur Radio Certification Course sponsored by the H.A.R.C., is being taught by senior Club members. Coordinator is Scott Verge, VE1SRV See the HARC website for more information.

October 18 – Greenwood Amateur Radio Club 26<sup>th</sup> Annual Flea Market

On Sunday evenings at 8:30, after you check in to the Take-15 Net, look for the new 2M, SSB NET at 8:30 PM Sundays on 144.230, SSB (horizontal - although some try vertical!)

Net control - BOB, VE1CZ, IS from Tatamagouche - so beam NORTH from metro; also others Pictou, Colchester, Cumberland & Westmorland Counties.

If you're at loose ends in Lisbon, Portugal on November 30 - 2014

The A.R.V.M. is organizing this Exposition for Radio Amateurs in Lisbon.

Come to one of the biggest events of Ham radio in Portugal

Our goal is, beyond the good deals in new & second hand ham radio equipment, is to (facilitate) a nice get together to all OM's.

Mais Inf.em: + Inf. em: http://www.arvm.org/feiraradio/2014/fr.htm

f.radio@arvm.org

A.R.V.M.

Fascinating Error in Judgement

"The concept is interesting and wellformed, but in order to earn better than a 'C,' the idea must be feasible"

-- A Yale University management professor in response to Fred Smith's paper proposing reliable overnight delivery service. (Smith went on to found Federal Express Corp.)

## Greenwood Amateur Radio Club 26<sup>th</sup> Annual Flea Market

All sorts of Amateur Radio, Computer and Electronics for sale. Sell your old stuff to buy some new old stuff!

<u>Date:</u> Saturday, October 18, 2014 <u>Times:</u> 10AM to 1:00PM

(Open 8 AM for sellers.)

Place: Greenwood Community Centre, Church Street, Greenwood, NS

<u>Cost:</u> \$4 per person. <u>Tables:</u> Free to sellers

#### Directions:

Drive to Exit 17, Hwy 101, to Kingston, and follow signs to Greenwood. Church Street is just outside the Main Gate of the 14 Wing Air Force Base.

GPS coordinates:

**N44**° **58.512**′ **W064**° **55.612**′ Talk-in: VE1WN, 147.24+

A BBQ Lunch will be available.

The door prize is a Kenwood TM-281A Mobile VHF Transceiver! Check it out at:

http://www.kenwoodusa.com/ communications/amateur\_radio/ mobiles/tm-281a

In addition, there will be various door prizes awarded throughout the morning!

To book tables contact Carol VE1ICY at cfhutchinson@gmail.com

To obtain further information contact Al Penney VO1NO at alphonsepenney@gmail.com

#### Answer to Puzzler on p.1

The National Do Not Call List (DNCL) is intended to give consumers a choice about whether to receive telemarketing calls. The National DNCL Rules introduce new responsibilities for Canada's telemarketers. Unfortunately it can do nothing about calls from outside of Canada

## The Brit Fader Scholarship

As we speed toward the end of 2014 – followed not long after by income tax time - consider legal ways of reducing your payable income tax like donating to the The Brit Fader Scholarship Trust. -ed

Does the scholarship fund accept contributions? Yes. We prefer to receive donations to build an endowment by investing the principal and paying scholarships out of income. To do this, donations must be made on the basis of what Canada Revenue Agency calls a "10 year grant", which requires the donor to complete a simple authorization form (see website, complete and send with your donation.

To donate, make cheques payable to Brit Fader Scholarship Trust and mail to the attention of Paul Radford, c/o Coady Filliter, Barristers & Solicitors, Suite 208, 5880 Spring Garden Road, Halifax, Nova Scotia, Canada B3H 1Y1.

Donations are tax deductible. We are a registered charity with Canada Revenue Agency (registration # 0984971-25).

#### **HARC** Website Update

The HARC website continues to be improved and updated on a regular basis - weekly at the very least.

If you follow the link from the home page "Monthly Meeting" "For Meeting Agenda...." you will find the monthly meeting agenda posted no later than 24 hours prior to the meeting.

D. Howard Dickson, VE1DHD // VE1ZD

Sign on a Proctologist's door:



To expedite your visit, please back in.



#### PRESIDENT'S MESSAGE: for October 2014

It has been almost two years since I assumed the HARC Presidency, and what a wonderful learning experience it has been! This role has given me a much greater appreciation of the wide range of talent we have in the Club as well as our exceptional diversity of experience in Amateur Radio.

On the first Saturday in October, I took part in *Operation Kingfisher*, an emergency communications exercise sponsored by EMO, which brought out many of our members with their diverse skills and experience to work together with hams from other Clubs and representatives of key community groups in the HRM. The purpose was to test our readiness to fulfill key communications roles when disaster strikes. Exactly how successful the exercise was will be made clear by a post event evaluation now underway. However, I would like to share with you a few thoughts and observations of my own.

Firstly, I have been a member of HARC for almost 45 years and involved in many activities that are a **part** of our routine emergency preparedness, e.g. field day, various operating events, etc., but it was only when as President I became involved with the EMO Radio Advisory Group that I really began to understand; 1) how vital is emergency preparedness; 2) how comprehensive — and relatively complicated - is a good emergency communications system; and 3) how demanding it is to get it right - that is to say, to actually be able to meet the communications needs of a real emergency. If we are not all working comfortably with compatible and well-functioning technically systems, and using skillfully the same set of procedures/protocols, things will function at a less than optimal level, if they don't just simply fall apart!

Secondly, I have almost 63 years of operating experience as a ham, and I like to think that my operating skills on the amateur modes and frequencies I use are good. However, being a part of *Operation Kingfisher* showed me that this is not enough. It is like being good at playing the piano and then taking up playing a guitar. Some new learning and lots of practise are needed to make the transition, and so it is with the somewhat different communications environment needed in public emergencies. Despite all my years on *the piano*, I made a lot of mistakes on *the guitar*! Fortunately I did take a course in preparation for the exercise so at least the melody was (more or less!) discernible. I strongly recommend that all Club members go through the training offered by Tom Caithness and other Club members. Your effort will pay dividends for our emergency preparedness – and it's fun and interesting! My thanks to all those who made *Operation Kingfisher* a reality.

Finally, I am increasingly aware that the societal foundation for amateur radio's allocation of more than 30 bands from VLF to EHF is our importance to society in <u>at least</u> four ways: our communication skills in times of disaster; our innovative skills in advancing radio science and technology; our contribution to science education and practise; and our general services to the community as event communicators. Several of these elements were advanced in *Operation Kingfisher* and are promoted in other aspects of our emergency preparedness efforts. I hope that over the months to come we can explore further our involvement in this critical area.

K. Scott Wood, VE1QD

# 1<sup>st</sup> Vice President's Report

The club has surplus gear that needs to be checked before we try to sell it. If anyone would like to check out a piece of gear let me know and we can determine a time to get it to you.

Some gear just needs a very basic check while others may need a little more checking to determine if they are worth selling.

Selling surplus gear is a way to raise funds for the club. New ideas are being explored to raise funds for the general operating of the club, but the sale of surplus gear is usually earmarked for the purchase of new equipment.

Contact me at: bowser.elliott@ns.sympatico.ca

Thank you - Bill Elliott, VE1MR

# HARC HF REMOTE SYSTEM

The HARC Remote System is now fully operational using the FT 990 and the Vertical Antenna. An Instruction / Operating Procedure has also been produced.

We are planning a training session which will take place Saturday afternoon Oct. 11.

Any Club member who holds an Advanced Certification who wishes to attend the Training Session, please contact Fraser Mac Dougall, VE1WO, with your contact information. The time and location of the training will be announced depending on the number of interested Amateurs.

Fraser's contact information is :Phone 902-865-4198
E-mail

FMAC@eastlink.ca

Forwarded by Gary, VE1RGB

Here is a small, non-inclusive list of things that can be bad with a coax run to the house. I have personally seen all of them at some time or place. Some big names, too.

- 1) At either or both ends, the shield was not soldered to the PL259 shell, and the connection has dwindled to a small percentage of the shield due to gradual destruction of the fine wire touching points.
- 1a) Ditto for the center conductor to the hollow center conductor pin of the PL259. Amazing how many PL259's are not soldered in a hurry to 'hear how it works". I've done it myself and forgotten I didn't. For years.
- 2) "Balun" is cheep junk, or burned up/melted/shorted turns/cracked/destroyed core, now junk.
- 3) Coax on tower is not high quality, and does not have it's weight supported. The stretch has changed the separation of shield and centerconductor, and the characteristic impedance has shifted, introducing an unwanted transformation into the equation.
- 3a) Coax is very old, but still "looks OK" even though it isn't. Much coax material undergoes very slow (even decades) chemical changes which can change characteristics. Wide frequency and TDR scans of coax into opens, shorts, checked 50 ohm and 200 ohm terminations are only way to check for still-OK-ness.
- 4) Water has invaded the coax, from a nick, tear or critter bite in the jacket, or non/poorly sealed coax connector, and capillary action has wicked along it's entire length. This can be hundreds of feet in the worst of cases. The loss-added coax does

not necessarily stay at 50 ohms Z zero. I have seen coax shields green (copper oxide) their entire length. Interestingly the practical outcomes of this extra loss was initially most often blamed on the transceiver.

- 5) Coax has been wrapped around a pipe by rotator torque. See 3)
- 6) Coax has had something heavy dropped on it. See 3)
- 7) Coax shield was only ground path for induced current for a close lightning strike. (Usually a direct strike smokes coax beyond any confusion.)
- 8) PL259 shell was not plierstightened and has worked loose, gradually producing burned points of connection.
- 9) Long coax run was laid tight in summer heat, and stretched in the winter. See 3)
- 10) Constant flexing of coax finally breaks the center conductor. After that, "connection" is strange.
- 11) Unsupported aerial coax overweighted by ice and stretched, pulled out of connectors, see 8).
- 12) Coax is innocent and it's really the antenna.
- 13) Operator in fact does not know how to operate the instrument or how to interpret readings.
- 14) Short lengths of coax and "other boxes" are ignored, and those in fact contain the problem.
- 15) Measuring instrument has been damaged or was defective from the factory.
- 15a) Measuring instrument is cheep junk.
- 16) Operator was "told" what the trouble was by a "trusted source" and

- is having a lot of trouble thinking outside of the "trusted box" when the trusted source was in fact in error for this instance.
- 17) Dummy load used to calibrate/provide 50 J zero comparison or reference termination is not 50 J zero for any number of reasons, including the likes of several seconds of QRO on a 2 watts worth of 50 ohms. Didn't turn black on the outside, but the resistor innards were already toast. Didn't \*look\* burned, so must be fine, right?
- 18) Dummy load while accurate at DC has significant reactive components at RF.
- 19) Coax was not 50 ohms from the get-go (try 56). But it looks good so it must be good. And the seller had a nice looking web page and the best price.
- 20) I need to wrap this up, but I know I'm not remembering something really juicy, which will come to mind after I hit the send button.

A group of Olde Pharte hams sitting around a table in a Lunche Jointe, came up with a napkin version of this that had over 40 items on it. The napkins were used for the inevitable outcome of ribs, and so was lost to posterity. One of these included a male F connector that had not had its threads grooved into the shell. This ignominious occurrence is not mentioned above, because it could not ever be part of a "working" setup. But it was amazing how many other things were blamed for "not fitting", including calls to an equipment maker about female chassis connectors, before the lack of threads was noticed.

Good luck to all and 73, Guy K2AV

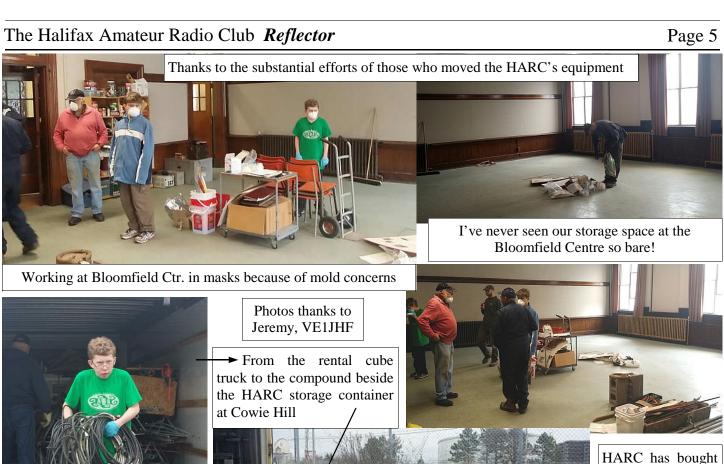
#### Fascinating Error in Judgement!

"The super computer is technologically impossible. It would take all of the water that flows over Niagara Falls to cool the heat generated by the number of vacuum tubes required."

-- Professor of Electrical Engineering, New York University

#### The Maritime Amateur

Ham Radio for Maritimers by Maritimers www.maritimeamateur.ca Acupuncture is a jab well done.



ARC has bought & customized our storage space at Cowie Hill to accommodate the, in many cases awkward, equipment we need to store out of the weather but accessable





AAH! Accessible tower sections

Fascinating Error in Judgement
"Computers in the future may weigh no
more than 1.5 tons."

-- Popular Mechanics, forecasting the relentless march of science, 1949 Halifax Amateur Radio Club General Meeting minutes 17 September 2014

Meeting convened 2040

Members present: WIN, JIM, SRV, HBB, QD, JDH SBC, ADH, JMA, LDL, AI, JG, BMJ, WO, JHF, BMF, GFA, OU, RGB, VA1CC, NN, TRI, KLF, GPY, IGP, BB, MR, DTR, TRB, WPH, RUS, TOM, AJP, ZMB, Amanda, Jayne.

Silent Keys: VE1KE, VE1WFG, VE1PN, VE1AJV, VE9GN, VE9DCB, VE1RFL, VE9CO, VE1TJP, VE1BZA, VE1RDB, VA3FP

# Agenda Approval

Minutes of last meeting approved: MR / JIM

No correspondence

<u>Presidents Report:</u> Thanks to those that helped John (JDH) in getting his antenna set up.

Brief mention about getting together a list of members who need HARC badges and submitting them to Atlantic Badges.

<u>Treasurers Report:</u> Jim (JG) gave the current financial report.

Motion to approve the financial report as read (JG); Seconded (WIN) Approved

Jim advised that budget figures will be presented at the Annual General meeting.

Bill (MR) advised that Wayne (WPH) is working on getting the inside of the repeater building finished up and getting the weather station installed.

He also advised that the IPARN dish has been dismantled and removed from Cowie Hill.

The 900MHz link is up and running and tested.

Bill is also waiting for people to come forward to help with projects, and gave a brief overview of what needed to be done.

Scott stressed the importance of people coming forward to help coordinate projects, because Bill is no longer able to organize things, but his is available for technical advice.

Terry (TRB) reminded everyone present about the rules for doing work on the roof and the need for fall arrest equipment for any climbing as well as filling out forms for same.

Jim (JIM) reported that he had a radio contact with Dave VA3IIF, who is recovering well from his operation and expects to be back in the province sometime in the fall.

Membership report:

No membership report from Howard, and Scott hadn't heard from him as of meeting time.

Nominating committee:

Dick (AI) reminded people of the importance of the Club to the members and to Ham Radio in general.

Dick as the chairman of the committee along with Gary (RGB) and Dave (AJP), stressed the importance of serving the Club as an Executive member and how they would like to see newer members come forward to serve, so that we are not perceived as an "old boys network", and that they would be approaching members to serve prior to the AGM and hoping for some success.

There was some discussion about the various positions within the Executive.

He advised that Brian Allen has accepted the position of liaison for the MMA and that he would be looking for assistance in that capacity as the MMA is gung ho to get some sort of permanent display set up.

Scott advised that Carol Wood has had to vacate the position of Reflector distribution manager, and that they are in immediate need of someone to pick up the task.

Amanda advised that she now works for Staples and could get us a further discount on Reflector printing.

Scott thanked Dick for his efforts in bringing this to the Club.

<u>Basic Radio Course:</u> Scott (SRV) gave a brief report on the current state of the course, and answered a couple of questions from the floor with regards to the course.

Britt Fader Scholarship:

Howard (DHD) was not present with any info.

#### EMO/SAR:

Dave (AJP) reminded those present about the upcoming Operation King-fisher communications exercise on Oct 4, and that there are 2 upcoming training sessions on the 20<sup>th</sup> and 27<sup>th</sup> for those interested in helping out.

He then apologized profusely for having to remove the SAR vehicles from the Field Day site for the overnight search, and regaled the members with his usual funny anecdotes about some recent search they conducted.

He reported about some radio problems they were having with their cables and antennas and repeaters.

Dick recounted the hasty removal of field day gear from the trucks and the fact that they took some of the SAR gear inadvertently.

Ian (IGP) thanked the members for their participation in the car rally, and gave a brief report on how the rally went, including the immense amount of volunteers they had to help out.

Bill (MR) gave a brief report on our Field Day score in response to a question and there was some discussion on the floor.

# Personal Member reports:

Sheldon (GPY) reported that the recent wind storm took out his wire antenna.

Fraser (WO) reported about his ongoing saga with power line noise and his dealing with NSPI trying to resolve it.

Dave (ADH) told us about his dealings with trying to avoid power line noise and how replacing his antenna after it broke finally solved some of the problems.

Scott reported briefly about the MS Walk and the MS Bike a Thon, that the pizza nights were well attended, and a mention about IOTA.

There is a plan to get together to do some tidying up and inventory of the

(Continued on page 7)

(Minutes – Continued from page 6)

items in the Cowie Hill storage container, and some minor maintenance to the roof in the form of some paint.

Brief mention of the electronics workstation and that we have some donations of tools to go along with it, and that anyone who has a need of some workspace for any project that they don't have room for, they are encouraged to avail themselves of it.

#### Remote Operation:

Fraser gave a report on the state of the remote station, and that there are several people interested in using it, and that there will be an upcoming training session for those interested. But, we still need a coordinator...

Archiving project: nothing to report at this time.

EMO report: Joe MacPherson was not available.

MPO committee: Craig (JMA) reported that the committee would

have a comprehensive report ready for the next General Meeting.

Member recruitment and retention: Howard was not present to give a report.

Scott gave a brief discussion about tightening up our spending and some ideas to further our fundraising efforts to ensure an adequate supply of funds in the future, including talk about another call book, and trying to obtain another grant from the city, and asked for input from the membership on this matter.

No other new business at this time.

Door Prize: Craig (JMA) \$25 gift certificate

50/50 Draw: Jim (JG) \$23.00

Motion to adjourn made and seconded

Meeting adjourned 2150

Respectfully submitted, Jeremy Fowler, VE1JHF, HARC Secretary



We've just received the IOTA 2014 provisional results. The VC1S group consisting of Fred, VE1FA; Helen, VA1YL; Al VO1NO; Lowell, VY2OX; Bill, VE1MR; Lynn VE1ENT; Mark, VA2MM and Wayne, VE1BAB achieved #10 in the world in our category (HP / MO / DX-pedition / mixed mode) with an adjudicated score of 3.142800M,

VC1S is also #1 in North America, #2 being NA-128, Grues Is., at 1.6M points.

PS Check out the links below for full details.

Fred Archibald, VE1FA

(For VC1S)

REPORT from the RSGB IOTA contest team:

This year we received 2467 logs, including checklogs. Of the 547,000 QSOs we were able to adjudicate 79%. We have received photographs from 228 stations and the majority of entrants have entered their location using Google maps.

The maps and photographs are inte-

hope that they will be of interest. We also give you the opportunity to enter/edit your location on Google maps using your UBN key and you can email any IOTA contest related photographs, one per entry, to the contest manager at iotacontest@rsgbcc.org.

A list of trophy winners will be pub-

grated into the results page and we

A list of trophy winners will be published on the website in due course. We hope to finalise the results by November 2nd 2014.

#### RESULTS PAGE:

http://www.iotacontest.com/contest/iota/2014/finalScore.php

#### PHOTO GALLERY:

http://www.iotacontest.com/contest/iota/2014/gallery.php

Official IOTA contest page: http://www.iotacontest.com

Your UBN report (in plain English): http://iotacontest.com/contest/iota/2014/

ubn/9c4d59de2ba3ecca6db9c4311a1 d4767.html Stella Awards – Outlandish Lawsuits & settlements



2013's runaway First Place Stella Award winner was: Mrs. Merv Grazinski, of Oklahoma City, Oklahoma, who purchased new 32-foot Winnebago motor home. On her first trip home, from an OU football game, having driven on to the freeway, she set the cruise control at 70 mph and calmly left the driver's seat to go to the back of the Winnebago to make herself a sandwich. Not surprisingly, the motor home left the freeway, crashed and overturned. Also not surprisingly, Mrs. Grazinski sued Winnebago for not putting in the owner's manual that she couldn't actually leave the driver's seat while the cruise control was set. The Oklahoma jury awarded her, are you sitting down?

\$1,750,000 PLUS a new motor home. Winnebago actually changed their manuals as a result of this suit, just in case Mrs. Grazinski has any relatives who might also buy a motor home.

The adult humpback whale is remarkably agile when diving & turning. Part of the reason for this lies in the bumps on the leading edge of its flippers. While most whales & other cetaceans' flippers have a smooth leading edge, the humpbacks flippers has uniquely large bumps (called tubercles) on their leading edge. As the humpback swims, water flows over the bumps and breaks up into a multitude of vortices. The bumps channel the water flow and create turbulence. This "tubercle effect" provides the whale with more lift allowing it to tilt its flippers at a high angle without stalling. At high angles these bumps also reduce drag, an important benefit for the humpbacks long flippers, each being about 1/3 of the whales body length.

Researchers are applying this concept to make more efficient boat rudders, water turbines, windmills and helicopter rotor blades.

# From the Mail Bag



Check this test unit out, it is shown starting at the 5 minute mark of the video in Episode 69 of "Amateur Logic"

https://www.youtube.com/watch?v=NJuYW0INihs

LCD Tester:

http://www.ebay.com/itm/Small-12864-LCD-Transistor-Tester-Capacitance-ESR-Meter-Diode-Triode-MOS-LCR-NPN-/321404670717?

pt=LH DefaultDomain 0&hash=item4ad53612fd

- Ken VY2RU

Be eccentric now. Don't wait for old age to wear purple.

A well done video... Ken, VY2RU

Vintage Radio and Communications Museum Tour....

Randy Hall K7AGE has released a video of the Vintage Radio and Communications Museum of Connecticut

After my visit to W1AW and ARRL Headquarters, I stopped by the museum. This place has everything. Ham radio, old radios, tubes, televisions, telco, film, computers and on and on.

Watch Vintage Radio and Communications Museum Tour: https://www.youtube.com/watch?v=jtaPOYP5AP0

Vintage Radio and Communications Museum of Connecticut

http://www.vrcmct.org/

# Forwarded by Ken, VY2RU

4 reasons why we need more digital voice modes (not fewer)

Working for a ham radio dealer, I get to hear a lot of perspectives on a lot of topics. By far, one of the strangest concerns I have heard voiced is that the major radio manufacturers can't agree on a standard protocol for digital voice. With Yaesu's introduction of System Fusion a few months ago, some are concerned that these disparate systems will somehow compromise the effectiveness of ham radio. This attitude may be the minority opinion, but I believe it's worth pointing out a few reasons why more digital modes are better than fewer:

1) For over a century, ham radio has been the hobby for innovators in electronics and communications. But for all of the technologies pioneered by hams, including those in the early digital days like packet, PSK31, and even APRS, we are sadly behind the times on innovating new digital modes and new uses for them. If we hope to one day lead the way again to new and exciting technologies for the industry, we should be fostering an environment of creativity and innovation, not letting a few vocal critics hold us back from change.

- 2) The RF spectrum we occupy is becoming increasingly valuable real estate every year, and traditional analog FM on VHF and UHF may not be around indefinitely. Just in the last 10 years, neighboring radio services (like land mobile) have had to squeeze in an ever-growing number of users with a fraction of the bandwidth. As usual, necessity drove innovation to make this possible with things like new trunking or digital protocols and narrower bandwidth hardware. Meanwhile, we're enjoying National Park status on the ham bands, but only so long as the regulators see fit to allow it. If we hope to keep our wide open spaces much longer, continuing to pioneer the innovations related to efficient use of the spectrum certainly makes it easier to justify the existence of the ham radio service.
- 3) Having more digital voice modes doesn't necessarily mean incompatibility. For example, with System Fusion, the latest development in the digital voice market, it's been very interesting to see how much effort Yaesu has gone through to facilitate analog and digital in a single system. As an "insider" in the industry, I can also say we're currently seeing significant investments

- in infrastructure to support several digital modes simultaneously, including System Fusion, P25, DRM, and D-STAR. And the components already exist that would allow the major manufacturers (or accessory manufacturers like DV Dongle or DV MEGA) to make a single radio capable of communicating on any of those four systems, and more. I know it's only a matter of time (and consumer demand) before we see interoperable radios hit the market.
- 4) Having more modes means more fun. It's interesting to see how many of our customers that have a standing order for any new D-STAR product are also making a reservations for System Fusion radios. It's not a Ford/Chevy rivalry for them; it's just another mode to experiment with, another tool in the toolbox. From where I sit, it's awesome and energizing to see these guys having so much fun in this hobby of ours by taking advantage of everything it has to offer.

What do you think, friends? Are you afraid your analog VHF radio will become obsolete? Or do you agree that innovation is an important facet of our hobby?

Carl Jordan, KJ4RYP, GigaParts.com

#### The 2014 Ludgewick Lookoff Rally

August 24<sup>th</sup> 2014 saw the longest Performance Car Rally in 20 years occur in Nova Scotia.

Between the  $22^{nd}$  and  $24^{th}$ , teams from Nova Scotia and Quebec took on the 120+km of the Ledwedge Lookoff Rally.

Friday consisted of the teams driving the roads in normal road cars, making notes to be used during the special stages. Saturday the teams did more note making in the morning, before moving to the Parc Expose with the proper Rally Cars, and the official start of the rally.

Late Saturday afternoon started the official stages, with Conrads Gravel in Dartmouth hosting hundreds of Spectators for 3 special stages.



Morning volunteers' briefing. (Visable are VE1RAR, VE1WST, VE1JDH, VE1LV)



Only one casualty but between the roll-cage and the 5-point seat belts/harnesses, the driver and navigator were O.K. – the same cannot be said for their vehicle

Sunday the Amateur Radio operators came into their element. 10 Operators from HARC, TARC and various other clubs met in Noel for the start of the days stages. 3 physical stages, between Noel and Walton, as well as the Service Park would be staffed with operators. The cars would push for the fasted combined time over 6 morning stages, and 6 afternoon stages.

Food and beverage was provided for lunch, with Quiznos Sub Sandwiches, and various beverages to keep one hydrated.

The eknowledge and resourcefulness of Amateur Operators came to full presentation,



with Hilltop Traffic relay, Yagis aimed into dense woods to transmit to stage finish locations, and car status and timing info passed back to the Service Park. This is an area of the province where you may or may not have cell service, depending on which way the wind blows, and Amateur Radio proved itself again and again.



Volunteers and competitors gathering for dinner..

Amateur Radio operators who provided communications for the Rally were:

VE1LV, Hal Rodd VE1RAR, Ralph Rosere VE1AJP, Dave George VE1CHL, Scott McNutt VE1PYE, Jason Ingraham VE1LDL, Doug Leblanc VE1JDH, John Den Hollander VE1WST, Sherrie George VA1MTN, Alexander Tamo VE1SCE, Shane Cotter-Earle Sincerest thanks from Organizers Ron and Nancy McKenzie, the Bluenose Autosport Club, and all the teams for helping to make this event possible. – Ian, VE1IGP



1st: Jon Conrad/Clarke Paynter, 2nd: James Whitman/Daphne Sleigh, 3rd: Ian Pearce/Gordon Sleigh)



#### Announcing a New Repeater!

VE1JCF, the new repeater at Rocky Mountain operates on 147.015 + with an APRS node just below



Clarence, VE1HD & Alan VE1HGG from the Pictou County ARC were 2 of the hams who installed the new VE1JCF repeater

Going somewhere in your car and want to check if your route has a holdup in traffic? Go to

http://www.tomtom.com/livetraffic/

HamRadioNow Episode 161: Yaesu's System (Con)Fusion....

In this episode of HamRadioNow Gary Pearce KN4AQ compares digital voice HT's running C4FM, D-STAR, P-25 and DMR

Gary's QST review of the Yaesu FTM-400 and FT1DR digital mobile and HT was long. This "addendum" video is even longer. You get your money's worth. We play with the radios thru a DR-1 repeater, and then compare HT's running Yaesu's C4FM, D-STAR, P-25 and DMR (MotoTRBO).

(Con)Fusion? Well, that's more on our part during the HT demo, but there are still some open questions about how this is all going to work. And maybe we're thinking about the 4 incompatible digital voice modes now populating VHF-UHF.

Watch Episode 161: Yaesu's System (Con)Fusion: https://www.youtube.com/watch?v=C1ClH3R17m0

#### More about bitcoins

The currency has struggled to shake off its associations with criminality, particularly its role in powering the now-defunct online drug marketplace Silk Road. Authorities have been taking an increasingly hard look at bitcoin and related virtual currencies including Litecoin, Namecoin, Ripple

and countless others. Some countries, including Russia, have effectively banned the currency. In other jurisdictions, authorities are weighing whether to try to tame the market-place through licenses or other mechanisms, called miners keep the system honest by pouring their computing power into a blockchain, a

YOU KNOW YOU ARE LIVING IN 2014 when...

- 1. You accidentally enter your password on the microwave.
- 2. You haven't played solitaire with real cards in years.
- 3. You have a list of 15 phone numbers to reach your family of 3.
- 4. You e-mail the person who works at the desk next to you.
- 5. Your reason for not staying in touch with friends and family is that they don't have e-mail addresses.
- 6. You pull up in your own driveway and use your cell phone to see if anyone is home to help you carry in the groceries.

Jill's car was unreliable and she called John for a ride every time it broke down. One day John got yet another one of those calls.

"What happened this time?" he asked.

"My brakes went out," Jill said. "Can you come to get me?"

"Where are you?" John asked.

"I'm in the drugstore," Jill responded.

"And where's the car?" John asked.
Jill replied, "It's in here with me."



global running tally of every bitcoin transaction. The blockchain prevents rogues from spending the same bitcoin twice, and the miners are rewarded for their efforts by being gifted with the occasional bitcoin. As long as miners keep the blockchain secure, counterfeiting shouldn't be an issue.